

FACT SHEET

COVID-19 infection in dental practice

Preliminary results suggest dentists may be at lower risk than other healthcare workers

Since the beginning of COVID-19 pandemic, dental practices in many countries have experienced periodic closures and restrictions due to concerns about the risk of SARS-CoV-2 transmission. Restricting access to dental care has resulted in negative consequences to oral health due to missed preventive care and delayed interventions^{1,2}. It also has other severe impacts, such as missed or delayed detection of oral cancers^{3,4} and increased inappropriate prescribing of antibiotics and analgesics^{5,6}.

Understanding the infection risk posed in dental practices is important to inform current and future decisions on dental practice restrictions and closures. With this goal, FDI is compiling data from countries worldwide to assess the rate of COVID-19 infection among dental practitioners.

How do dentist infection rates compare to those in other healthcare workers?

The below preliminary data, collected through a survey of national dental associations and literature search, show dentists infection rates in five different countries. They are compared with the overall infection rates of other healthcare workers, excluding dentists and other oral health professionals, over the same time frame.

Country	Dentist infection rate (per 10,000)	Health care worker infection rate (per 10,000)	Reporting date
Brazil	81.4	181.7	05.07.2020
Colombia	60	76.9 – 96.0 (a)	24.07.2020
Portugal	18.3	360.7	06.05.2020
Spain	304.9	922.9	19.06.2020
USA	91.1	117.9	12.06.2020

(a) Range of HCW infections estimated using proportion of total cases at different timepoints during the pandemic

What do these data tell us?

These are preliminary data and health professional infection rates must be interpreted with caution, given that some health professions may have stopped practicing for certain periods during the pandemic and the different reporting systems used. However, the data suggest that COVID-19 infection in dental practice may be less likely than in other healthcare settings. There may be several reasons for this. Importantly, people experiencing COVID-19 symptoms are unlikely to visit the dentist^{7,8}, and measures are in place to reduce this risk in many countries, such as pre-treatment screening questionnaires⁹. Prior to the pandemic, oral health professionals already used a high-level of Personal Protective Equipment (PPE)⁷. Coupled with the strengthening of PPE recommendations in many countries early in the pandemic⁹, this may also reduce the risk of infection in dental practice.

Further research is needed to better understand these infection rates and the differences between dentists and other healthcare workers, and between countries. FDI is continuing to compile further data from more countries and will publish the full results of its work in the coming months.

References

1. Hopcraft M, Farmer G. Impact of COVID-19 on the provision of paediatric dental care: Analysis of the Australian Child Dental Benefits Schedule. *Community Dent Oral Epidemiol*. 2020; Epub ahead of print. Available from: <u>https://doi.org/10.1111/cdoe.12611</u>.

2. Okike I, Reid A, Woonsam K, Dickenson A. COVID-19 and the impact on child dental services in the UK. *BMJ Paediatr Open*. 2021;5(1):e000853. Available from: <u>https://doi.org/10.1136/bmjpo-2020-000853</u>.

3. Al-Maweri SA, Halboub E, Warnakulasuriya S. Impact of COVID-19 on the early detection of oral cancer: A special emphasis on high risk populations. *Oral Oncol.* 2020;106. Available from: https://doi.org/10.1016/j.oraloncology.2020.104760.

4. da Cunha AR, Antunes JLF, Martins MD, Petti S, Hugo FN. The impact of the COVID-19 pandemic on hospitalizations for oral and oropharyngeal cancer in Brazil. *Community Dent Oral Epidemiol*. 2021; Epub ahead of print. Available from: <u>https://doi.org/10.1111/cdoe.12632</u>.

5. Shah S, Wordley V, Thompson W. How did COVID-19 impact on dental antibiotic prescribing across England? *Br Dent J.* 2020;229(9):601-604. Available from: <u>https://doi.org/10.1038/s41415-020-2336-6</u>.

6. Palmer NOA, Seoudi N. The effect of SARS-CoV-2 on the prescribing of antimicrobials and analgesics by NHS general dental practitioners in England. *Br Dent J.* 2021. Available from: https://doi.org/10.1038/s41415-020-2595-2.

7. Ren Y, Feng C, Rasubala L, Malmstrom H, Eliav E. Risk for dental healthcare professionals during the COVID-19 global pandemic: An evidence-based assessment. *J Dent.* 2020;101- Availble from: https://doi.org/10.1016/j.jdent.2020.103434.

8. Nardone M, Cordone A, Petti S. Occupational COVID-19 risk to dental staff working in a public dental unit in the outbreak epicenter. *Oral Dis.* 2020;00:1–13. Available from: <u>https://doi.org/10.1111/odi.13632</u>.

9. Clarkson J, Ramsey C, Aceves M, Brazzelli M, Colloc T, Dave M, et al. Recommendations for thereopening of dental services: a rapid review of international sources. COVID-19 Dental Services Evidence Review (CoDER) Working Group; 2020. Available from:

https://oralhealth.cochrane.org/sites/oralhealth.cochrane.org/files/public/uploads/covid19_dental_review_16_m ay_2020_update.pdf.